TITLE: Use of phenylpyrimidines as plant growth regulators

INVENTOR(S): Seiler, Alfred; Mueller, Urs Ciba-Geigy A.-G., Ger. Dem. Rep. PATENT ASSIGNEE(S):

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CODEN: EPXXDW DOCUMENT TYPE: Patent

LANGUAGE: German

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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 136976	A2	19850410	EP 1984-810408	19840820 <
EP 136976	A3	19850515		
R: BE, CH, DE,	FR, GB	, IT, LI, NL		
JP 60072808	A	19850424	JP 1984-175823	19840823 <
PRIORITY APPLN. INFO.:			CH 1983-4614 A	19830823 <
OTHER SOURCE(S):	MARPAT	104:47176		
ED Entered STN: 23 Fel	b 1986			

ED

The phenylpyrimidines I (R = H, halo, NO2, CN, OH, alkyl, etc.; R1 and R2 = H, AB halo, alkyl, alkoxyalkyl, etc.; R3 = H, halo, alkyl, haloalkyl, or Ph) are plant growth regulators. Thus, 2-phenyl-4,6-dichloropyrimidine [3740-92-9] (500 mg/kg), applied as a seed dressing, increased the length and weight of wheat roots. The synthesis of I is given.

ICM A01N043-54

CC 5-3 (Agrochemical Bioregulators)

Section cross-reference(s): 28 3740-90-7P 3740-91-8P 3740-92-9P 13514-79-9P 14727-23-2P 15726-40-6P 17077-89-3P 17077-93-9P 20655-14-5P 21139-61-7P 21139-63-9P 26863-48-9P 26863-54-7P 26870-72-4P 29509-92-0P 29954-25-4P 35252-98-3P 72520-17-3P 77232-12-3P 77232-14-5P 77232-18-99 77232-19-0P 77232-21-4P 77232-23-6P 77232-25-8P 79382-42-6P 79382-43-7P 79382-44-8P 79382-47-1P 79382-45-9P 79382-46-0P 79382-50-6P 79382-49-3P 79382-48-2P 79382-51-7₽ 79382-68-6P 79382-77-7P 79382-78-8P 79382-82-4P 79396-00-2P 83216-81-3P 83216-82-4P 83216-83-5P 83216-84-6P 83216-85-7P 83216-86-8P 83216-87-99 83216-88-0P 83216-89-19 83216-90-4P 83216-91-5P 83216-92-6P 83216-93-7P 83216-94-8P 83216-95-9P 83216-96-0P 83216-97-1P 83216-98-2P 83216-99-3P 83217-00-9P 83217-01-0P 83217-02-1P 83217-03-2P 83217-04-3P 83217-05-4P 83217-06-5P 83217-07-6P 83217-08-7P 83217-09-8P

83217-10-1P 83217-11-2P 83217-12-3P 83217-13-4P 83217-14-5P

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83217-15-6P 83217-16-7P 83217-17-8P 83217-18-9P 83217-19-0P
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97513-47-8P 97513-48-9P
                         97513-49-0P 97513-50-3P
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97513-56-9P 97702-44-8P 97702-45-9P 97702-46-0P 97702-47-1P
97702-48-2P
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RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as plant-growth regulator)

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72520-17-3P	77	232-	-14-	-5P	77232-	-18	-99
77232-19-0P	77	232-	-21-	-4P	77232-	-23	-69
79382-42-6P	75	382-	-43-	-72	79382-	-44	-85
79382-46-0P	75	382-	-47-	-12	79382-	48	-25
79382-49-3P	75	382-	-50-	-62	79382-	51	-72
79382-78-8P	79	382-	-82-	-4P	83216-	-84	62
83216-85-78	83	216-	-86-	-82	83216-	-87	-92
83216-88-0P	83	216-	-89-	-1P	83216-	-90	-4P
83216-91-5P	83	216-	-92-	-6P	83216-	-93	-79
83216-94-8P	83	216-	-98-	-2P	83216-	-99	-32
83217-00-9P	83	217-	-01-	-0°P	83217-	-02	-1P
83217-03-2P		217-			83217-	******	*******
97513-49-0P							

RL: AGR (Agricultural use); BAC (Biological activity or effector,

except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as plant-growth regulator)

RN 72520-17-3 HCAPLUS

CN Pyrimidine, 4-methoxy-6-methyl-2-phenyl- (CA INDEX NAME)

RN 77232-14-5 HCAPLUS

CN Pyrimidine, 4,6-dimethoxy-2-(4-methylphenyl)- (CA INDEX NAME)

RN 77232-18-9 HCAPLUS

CN Pyrimidine, 4,6-diethoxy-2-(4-methylphenyl)- (CA INDEX NAME)

RN 77232-19-0 HCAPLUS

CN Pyrimidine, 2-(4-methylphenyl)-4,6-dipropoxy- (CA INDEX NAME)

$$n\text{-PrO} \underbrace{\qquad \qquad \qquad \qquad }_{N} \underbrace{\qquad \qquad }_{Me}$$

RN 77232-21-4 HCAPLUS

CN Pyrimidine, 4-chloro-2-(4-methylphenyl)-6-phenyl- (CA INDEX NAME)

$$\text{Cl} \underbrace{\qquad \qquad \qquad \qquad }_{\mathbb{P}h} \mathbb{N} \underbrace{\qquad \qquad }_{\mathbb{M} \oplus}$$

RN 77232-23-6 HCAPLUS

CN Pyrimidine, 4-methoxy-2-(4-methylphenyl)-6-phenyl- (CA INDEX NAME)

$$\stackrel{\text{MeO}}{\longrightarrow} \stackrel{\mathbb{N}}{\longrightarrow} \stackrel{\mathbb{N}}$$

RN 79382-42-6 HCAPLUS

CN Pyrimidine, 4,6-bis(1-methylethoxy)-2-(4-methylphenyl)- (CA INDEX NAME)

RN 79382-43-7 HCAPLUS

CN Pyrimidine, 2-(4-methylphenyl)-4,6-diphenoxy- (CA INDEX NAME)

RN 79382-44-8 HCAPLUS

CN Pyrimidine, 4,6-bis(2-methoxyethoxy)-2-(4-methylphenyl)- (CA INDEX NAME)

RN 79382-46-0 HCAPLUS

CN 4-Pyrimidinamine, 6-(2-methoxyethoxy)-N-methyl-2-(4-methylphenyl)- (CA INDEX NAME)

RN 79382-47-1 HCAPLUS

CN 4-Pyrimidinamine, N,N-diethyl-6-(2-methoxyethoxy)-2-(4-methylphenyl)- (CA INDEX NAME)

- RN 79382-48-2 HCAPLUS
- CN 4-Pyrimidinamine, 6-chloro-N-methyl-2-(4-methylphenyl)- (CA INDEX NAME)

- RN 79382-49-3 HCAPLUS
- CN 4-Pyrimidinamine, 6-chloro-N,N-diethyl-2-(4-methylphenyl)- (CA INDEX NAME)

- RN 79382-50-6 HCAPLUS
- CN Pyrimidine, 4,6-bis(ethylthio)-2-(4-methylphenyl)- (CA INDEX NAME)

- RN 79382-51-7 HCAPLUS
- CN Pyrimidine, 4,6-dibutoxy-2-(4-methylphenyl)- (CA INDEX NAME)

- RN 79382-78-8 HCAPLUS
- CN Pyrimidine, 4-methoxy-6-methyl-2-(4-methylphenyl)- (CA INDEX NAME)

RN 79382-82-4 HCAPLUS

CN Pyrimidine, 4-methyl-2-(4-methylphenyl)-6-phenoxy- (CA INDEX NAME)

RN 83216-84-6 HCAPLUS

CN Pyrimidine, 4-chloro-6-methoxy-2-(4-methylphenyl)- (CA INDEX NAME)

RN 83216-85-7 HCAPLUS

CN Pyrimidine, 4-chloro-6-methoxy-5-methyl-2-(4-methylphenyl)- (CA INDEX NAME)

RN 83216-86-8 HCAPLUS

CN Pyrimidine, 4-chloro-6-(1-methylethoxy)-2-(4-methylphenyl)- (CA INDEX NAME)

RN 83216-87-9 HCAPLUS

CN Pyrimidine, 4-chloro-2-(4-methylphenyl)-6-phenoxy- (CA INDEX NAME)

RN 83216-88-0 HCAPLUS

CN 4-Pyrimidinamine, 5-bromo-6-chloro-N-methyl-2-(4-methylphenyl)- (CA INDEX NAME)

RN 83216-89-1 HCAPLUS

CN Pyrimidine, 4-(2-methoxyethoxy)-6-methyl-2-phenyl- (CA INDEX NAME)

RN 83216-90-4 HCAPLUS

CN Pyrimidine, 4-[2-(2-methoxyethoxy)ethoxy]-6-methyl-2-phenyl- (CA INDEX NAME)

RN 83216-91-5 HCAPLUS

CN Pyrimidine, 4-(2-methoxyethoxy)-6-methyl-2-(4-methylphenyl)- (CA INDEX NAME)

RN 83216-92-6 HCAPLUS

CN 4-Pyrimidinamine, N,N,6-trimethyl-2-phenyl- (CA INDEX NAME)

RN 83216-93-7 HCAPLUS

CN 4-Pyrimidinamine, N,N,6-trimethyl-2-(4-methylphenyl)- (CA INDEX NAME)

RN 83216-94-8 HCAPLUS

CN 4-Pyrimidinamine, 5-bromo-N,N,6-trimethyl-2-(4-methylphenyl)- (CA INDEX NAME)

RN 83216-98-2 HCAPLUS

CN Pyrimidine, 4,6-dimethoxy-5-methyl-2-(4-methylphenyl)- (CA INDEX NAME)

- RN 83216-99-3 HCAPLUS
- CN Pyrimidine, 4,6-dimethoxy-2-(4-methylphenyl)-5-phenyl- (CA INDEX NAME)

- RN 83217-00-9 HCAPLUS
- CN Pyrimidine, 5-bromo-4,6-bis(1-methylethoxy)-2-(4-methylphenyl)- (CA INDEX NAME)

- RN 83217-01-0 HCAPLUS
- CN Pyrimidine, 4,6-bis(2-methoxyethoxy)-5-methyl-2-(4-methylphenyl)- (CA INDEX NAME)

- RN 83217-02-1 HCAPLUS
- CN Pyrimidine, 5-chloro-4,6-bis(2-methoxyethoxy)-2-(4-methylphenyl)- (CA INDEX NAME)

- RN 83217-03-2 HCAPLUS
- CN Pyrimidine, 5-bromo-4,6-bis(2-methoxyethoxy)-2-(4-methylphenyl)- (CA INDEX NAME)

RN 83217-04-3 HCAPLUS

CN 4-Pyrimidinamine, 5-bromo-6-(2-methoxyethoxy)-N-methyl-2-(4-methylphenyl)-(CA INDEX NAME)

RN 83217-71-4 HCAPLUS

CN 4-Pyrimidinol, 6-chloro-2-(4-methylphenyl)-, 4-acetate (CA INDEX NAME)

RN 97513-49-0 HCAPLUS

CN 4-Pyrimidinesulfonic acid, 3,6-dihydro-2-(4-methylphenyl)-6-oxo-, methyl ester (CA INDEX NAME)